

The Institution of Engineers, Australia: Sydney Division
Engineering Heritage Committee
ORAL HISTORY PROGRAM

INTERVIEWEE James Dale McBEAN

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INTERVIEWER Frank Jackson

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Tape: IEA SYD FJ 12 Side A

TAPE LOG

TAPE COUNTER	SUBJECT	NAMES & KEYWORDS
0 – 57	Introduction - born Melbourne 18 th October 1933. Father a Gallipoli survivor family lived in Urana. In 1939 father went to 2 nd World War and commanded a tank regiment in New Guinea. Mother Scottish, came to Aust 1903. brother Ian Roy McBean large landowner in Northern Territory	James Drysdale McBean Born Melbourne 18/10/1933 Urana
58 – 145	Moved to Sydney 1939 attended St. Andrews Prep. School in Manly for 2 yrs., then Mosman C.of E. Prep. School H.M. Tibby Arnold – a great educator - and Deputy Hd Eric Mcdougal. Both teachers great influences on J.M.B. He attended Sydney Church of England Grammar School ('Shore') for secondary schooling. Shore H.M was L.C.Robson- took the senior class for Mathematics & Physics – Dale excelled in Maths and Physics subjects. Psychological testing at school indicated engineering as best career option. He was awarded a Forestry Commission cadetship to Sydney University. A failure in Chemistry at end of 1 st yr. Led Dale to pursue engineering studies in the Civil Engineering Diploma Course at the Sydney Technical College, which, being part-time permitted him to take on full-time employment in 1953 as a Trainee Engineer with Stanley Llewellyn & Whitten, Consulting Structural Engineers in Sydney. Whilst still a trainee, engaged on structural design working in office of Rankine & Hill, both of whom were former employees of S L & W. This grounding, plus association with Henry Llewellyn, was invaluable for later career. An interesting early project was Thornleigh's Timber Yard, which employed timber extensively – very little design data available and no Codes for timber design. Timber as a construction material getting increased emphasis currently, with use of plantation timber. Amongst other projects were schools and technical colleges for NSW Govt. In 1965 became a partner in firm, at 31	Tibby Arnold Mcdougal S.C.E.G.S L.C.Robson University of Sydney Sydney Technic College StanleyLlewellyn & Whitten Rankine & Hill Henry Llewellyn
146 – 210		
211 - 227		Partnership in S L & W in 1965

Tape FJ 12 Side A continued

TAPE COUNTER	SUBJECT	NAMES & KEYWORDS
228 – 281	A notable project was the Bank of Adelaide building in Sydney; a 15 story building which was the maximum allowable height at that period. S L & W specialised in structural design; no civil works undertaken. In 1973, for a number of reasons, he decided leave S L & W and start his own business, James McBean Consulting Engineers Pty Ltd. Few problems getting established – many customers former clients of S L & W. In the firm's first year was engaged on Concord High School which was the first of many Govt, contracts. The firm was small – 12 only – the work was hard but very profitable. At this time, James McBean was increasingly involved with the affairs of The Association of Consulting Structural Engineers of NSW. In 1978 merged with Colin Crisp to form McBean & Crisp. A client was Associated Mills which gave them a lot of work in New Guinea and the Solomon Islands - silo foundations, flour and rice mill in Honiara, etc. Earthquake design was a requirement of the area and use was made of the New Zealand earthquake design This was the major difference, wind codes and steel and concrete codes of Australia used generally. Major problem was obtaining materials – most, steel, wall claddings had to be shipped from Australia. To practise in P.N.G. it was necessary to be a member of the local Society of Professional Engineers (later became an Institution) Local training establishments Tech colleges, university (?) produced graduates but even to-day majority of Fellows of the Institution are Australian or English. Most of design work was undertaken in Australia, and the construction phases overseen by Ove Arup or Cardnow & Davies. Colin Crisp in particular was distinguished for heritage engineering projects. McB & C developed a technique for preserving structural timbers, weakened by termite attack, by injecting epoxy resin into the interior, after cleaning out debris, and inserting re-inforcing bars, leaving the outer skin intact. System first used at Hyde Park Barracks Museum. Another notable achievement was the strengthening of the Sydney G.P.O. Clock Tower against seismic loading. The sandstone blocks were cored in both vertical and horizontal directions and post-tensioning cables inserted.	Bank of Adelaide building Sydney
282 – 313		James McBean Consulting Engineers P/L
314 – 327		McBean & Crisp, 1978
328 – 354		
355 – 434		Hyde Park Barracks Museum
435 - 462		GPO Clock Tower

Tape FJ12 Side B

TAPE COUNTER	SUBJECT	NAMES & KEYWORDS
0 – 86 87 – 108	Continuing description of reinforcement of Sydney GPO clock tower. Firm continuing on with heritage projects including the continued monitoring of historic buildings, e.g. Rouse Hill House and Minton Barracks building. These activities have led to a number of projects for repair of modern multi-story buildings, which activity is still current, as well as design of new buildings. Commenced serving on Committee of Assoc. of Consulting Structural Engineers in 1968 leading to the Presidency in 1973. In 1975 he transferred his support to the Assoc. of Consulting Engrs. Aust., NSW Chapter, from committee man to Chairman in 1981	GPO Clock Tower Rouse Hill House Minton Barracks
109 - 138		Assoc. Consult. Structural Engrs. Assoc. Consult. Engrs Aust

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TAPE COUNTER	SUBJECT	NAMES & KEYWORDS
139 – 149	He was a Councillor of The National body from 1977 to attaining the President	Assoc. Consult. Engrs Aust
150 – 187	In 1992 he lent his support to the Institution of Engineers Aust revising Code of Ethics. He described the genesis and functions of other bodies in which he has played a significant part -- Aust. Council of Building Design Professions and The Construction Industry Development Council	Inst. Engrs. Aust. Aust. Ccl. of Building Design Professions Const. Industry Developm't Ccl.
188 – 240	Career in retrospect – big changes – introduction of computers – speeds up design process, but designer loses "feel" for design afforded by the old manual methods. Application to civil design, particularly. Reduced time for design suggests greater profitability, but this countered by clients putting the "squeeze" on fees..	Developments in engineering practice.
241 - 266	Calibre of to-day's graduates – training possibly better, but less practical in dealing with the real world. – poor at self-expression – report writing particularly bad.	Engineering training
267 – 345	Liability law a major problem – comparison between former practice and to-day's litigious environment. Problems with "capping" of engineer's liability. Difficulties under Workcover Australia for the designer's inspection staff, on building sites. Ethics in the profession - change from a profession to a "business" compromises the ethics of professionals	Liability legislation Workcover Australia Ethics
346 – 367	Retirement plans - Association with Richard & Ross	Richard & Ross
368 - 385	Family matters – wife Mary McBean – three children – two daughters- one son. Conclusion	Mary McBean Alan Buzacott